

Project Work Plan

The MoveAZ Long Range Plan recommends a plan update every five years. In order to accomplish this requirement, a series of regional profiles is being undertaken. The Arizona Department of Transportation (ADOT) will select a consultant to prepare the Western Area Regional Transportation Profile (WARTP) to provide a comprehensive evaluation of the needs of all roads on the state highway system in western Arizona. The results of the WARTP will provide the technical foundation for updating the MoveAZ Long Range Plan with a range of multimodal projects.

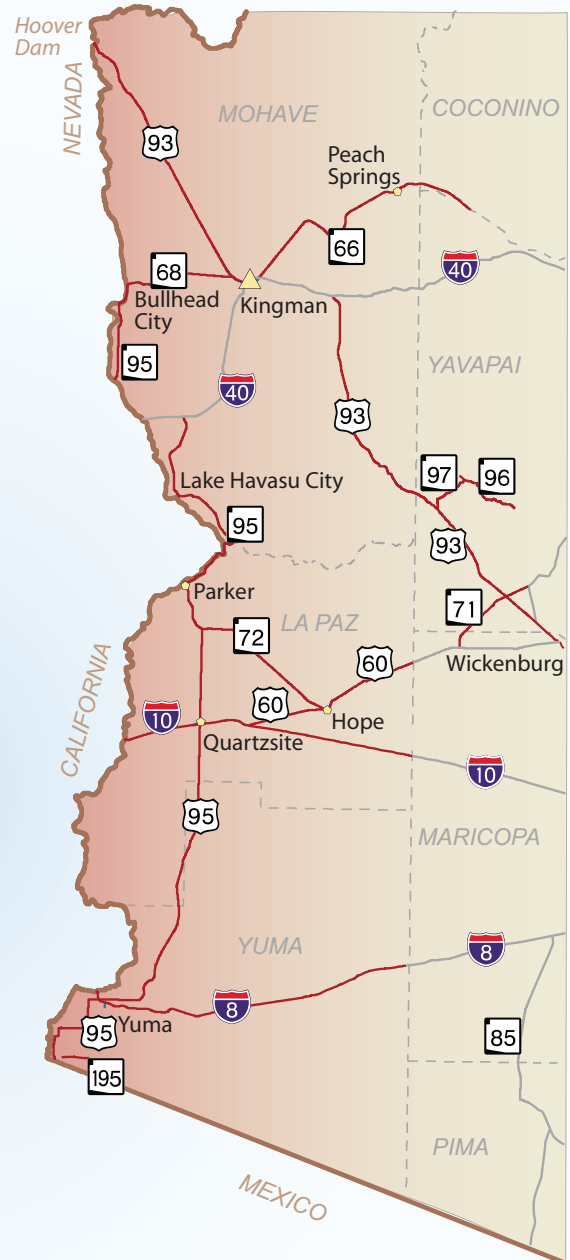
Key objectives that will guide the study process include:

- ☐ Evaluate existing and future transportation conditions
- ☐ Identify needs and deficiencies on the highway system
- ☐ Identify needs and deficiencies in the multimodal systems along the state highways
- ☐ Conduct a series of public involvement and stakeholder meetings to identify issues, present improvements and obtain input
- ☐ Develop a list of potential improvement projects for the state highways and multimodal facilities
- ☐ Evaluate potential performance of project bundles
- ☐ Prepare a prioritized program of recommended projects

Western Region Transportation System

The Western Region includes three counties along the California border (Yuma, La Paz and Mohave) and a small portion of Yavapai County. The state highways in the area provide for regional travel, access to recreation destinations, and commuter traffic. The study area includes two interstate highways (I-8 and I-10) and several state and US highways.

Study Area Map



Approach

PB's overall study approach will follow the process direction and guidance provided in the RTP Guidelines and the Western Area RTP RFP. The study process flowchart identifies the major tasks.

Resources that will be used to carry out the steps include HPMS data, travel demand models, ADOT Transportation Planning, ADOT Districts, local agencies, and public input. A Western Arizona geographical information system (GIS) database will be developed for inventorying data and for displaying results. In compliance with ADOT's Regional Transportation Profile Guidelines, we will use HERS-ST as an analysis tool for performance evaluation and identification of deficiencies.

The HERS-ST model evaluates current condition information, determines deficiencies, and designs alternative improvement options according to engineering standards, and selects the best improvements to correct the deficiencies according to economic principles. The basis for project prioritization is to select projects that have benefits exceeding the initial improvement cost of the project.

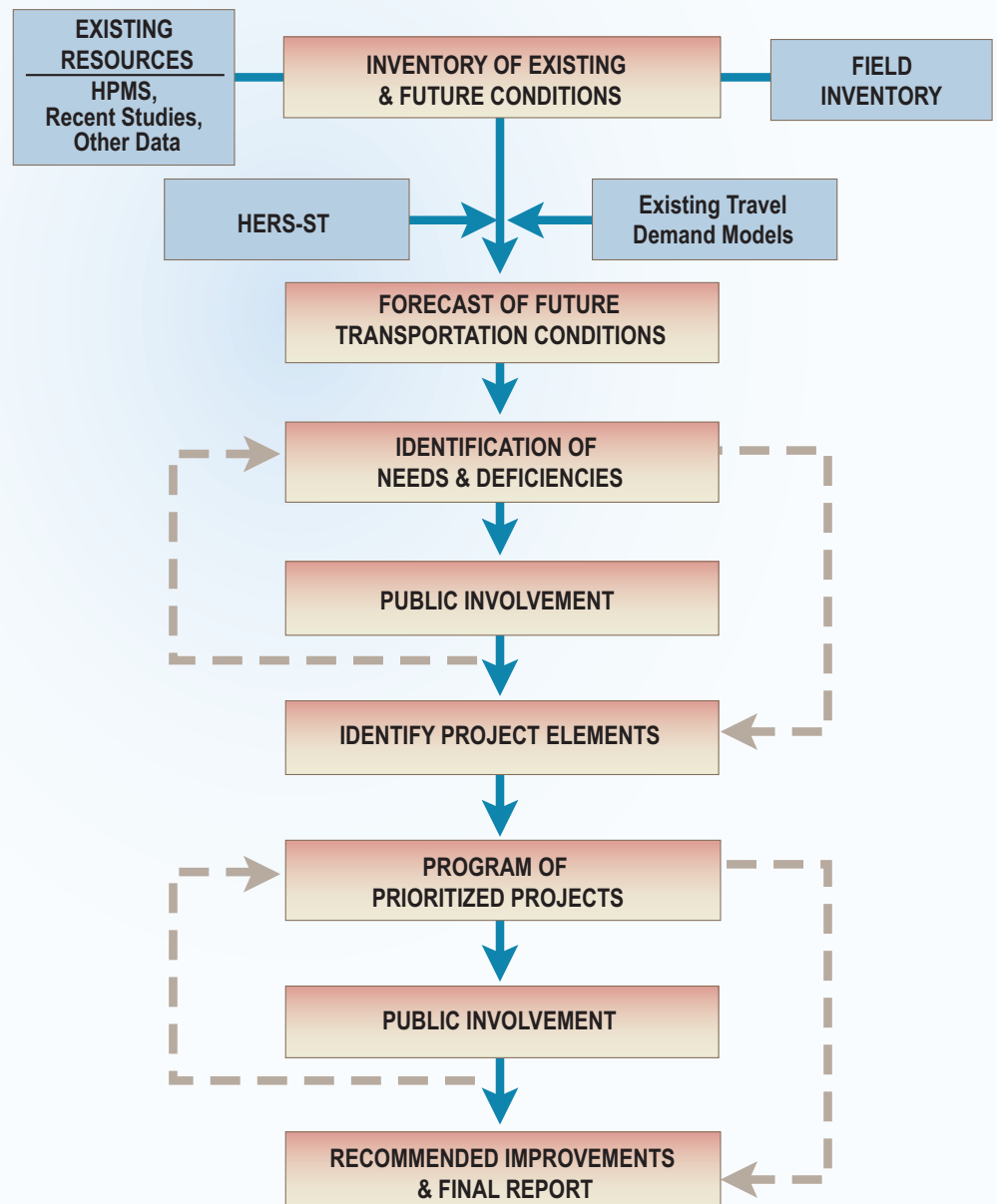
Since the HERS-ST model is limited to highway applications, generally accepted planning criteria and existing databases will be used to identify certain other system deficiencies. Other system components such as multimodal components, bridges, ports of entry, safety and security considerations, and potential new roadways will be evaluated outside the HERS-ST application.

The work plan for the Western Area Regional Transportation Profile includes eight major tasks as described in the following sections:

Task 1: Study Initiation

This first task includes a refinement of the study area boundaries, revisions to the scope of work, and development of the project schedule included in this proposal. Based on discussions with ADOT, any appropriate refinements will be made. As part of this task, we will discuss and define the agency coordination activities and develop a Public Involvement Plan.

Study Process Flowchart



State Highway System Roadways In The Western Area

Route	Limits	# of Through Lanes	Functional Class	LENGTH (MILES)
SR 95	Entire length	2 & 4	Rural principal other & urban principal other	118
US 93	Entire length	2 & 4	Rural principal other & urban principal other	178
SR 97	Entire length	2	Rural major collector	12
SR 96	Entire length	2	Rural major collector & rural minor collector	21
US 60	I-10 to LaPaz County Line	2 & 4	Rural major collector	43
SR 68	Entire length	4	Rural principal other	28
SR 72	Entire length	2	Rural major collector	37
SR 71	Entire length	2	Rural major collector	24
SR 66	Entire length	2 & 4	Rural major collector	67
I-10	State line to LaPaz County Line	4	Rural principal interstate	71
I-8	State line to Yuma County Line	4	Rural principal interstate	80
US 95	Entire length	2 & 4	Rural principal other & urban principal other	105
B-10	Entire length	2	Rural major collector	2
SR 95 Spur	Entire length	2 & 4	Rural major collector	1
SR 195	Entire length	2	Rural minor arterial	3

The plan will outline the procedures and methods for the participation of public interest groups and the general public. It will include notification methods and the format and procedures to be used at public meetings. The plan will identify tentative meeting locations to provide complete coverage of the study area.

The product of this task is Technical Memorandum No. 1, which will present the final work plan, study area boundaries, schedule, and staffing requirements. The Public Involvement Plan will also be submitted to ADOT for review and concurrence.

Task 2: Describe Existing and Future Conditions

Existing Conditions

Beginning with the project initiation, PB will collect, document, and summarize existing socioeconomic conditions, state highway conditions and multimodal transportation conditions throughout the study area. All existing planning reports, engineering documents, and technical papers related to the study corridor will be reviewed and documented. Conditions will be displayed in GIS maps.

Land Use: The land use inventory will include current land uses and identify major developments adjacent to

the state highway system. Specific traffic generators and destination points will be noted. Land ownership will be displayed on GIS maps for the Western Area. Maps will include jurisdictional boundaries.

Roadway Conditions: The existing conditions for each facility on the state highway system in the Western Area will be inventoried. The study area contains approximately 790 centerline miles of roadways. The base for the inventory of existing conditions will be the updated ADOT HPMS data set (100% sample) for the Western Arizona Region. **It is our understanding that the HPMS data is currently being updated by others and will be provided for our use for the Western Area Regional Transportation Profile. Additional updating of HPMS is not included.**

Travel Data: The Average Annual Daily Traffic (AADT) will be obtained from the updated HPMS. The Level of Service (LOS) will be calculated based on threshold volumes. Threshold volumes in HERS-ST AZ will be reviewed and modified for area conditions where needed. Crash data will be obtained from the ADOT ALISS database for a five-year period. Crash rates will be calculated and updated in HPMS. The crash data will be displayed on GIS maps to note areas of high concentrations of crashes.

Socioeconomic Conditions: The characteristics of the existing residents and businesses in the area will be determined by a review of U.S. Census data and local plans. As required by Title VI and the Executive Order on Environmental Justice, minority and low-income populations will be identified.

Environmental Characteristics: The environmental inventory will document known environmental conditions that may impact future projects. Information on biological resources, hazardous materials, archaeological and cultural resources, floodplains, and visual resources will be obtained through literature searches and past studies.

Multimodal Conditions: Multimodal facilities along the state highways in the study area will be inventoried including transit, pedestrian facilities, bicycle facilities, and intermodal facilities. We will obtain data from ADOT, YMPO, WACOG, and the local jurisdictions and present the data on GIS maps.



Future Conditions

Recently completed General Plans for the cities and counties and the ADOT 2006 – 2010 Five-Year program will be reviewed.

Future Traffic Volumes will be estimated for the years 2015 and 2030 using an approach based on the review of existing travel demand models for urbanized areas in the study area, review of traffic forecasts in recently completed roadway studies, population projections, and land use information provided by jurisdictions.



US 95 near Yuma



US 95 in Somerton

For the 2015 and 2030 traffic volumes and highway networks, the LOS for highway segments will be calculated based on threshold volumes. Future year traffic volumes and LOS will be mapped.

Document Findings

Prepare Working Paper No. 1 documenting existing and future conditions. The working paper will include GIS maps, tables and charts to clearly relay the findings of Task 2. Working Paper No. 1 will be submitted to the TAC for review and comments. Comments will be incorporated into the Draft Final Report.

Task 3: Needs and Deficiencies

Run HERS-ST Model to Identify Deficiencies. The HPMS Western Region data set will be imported into the HERS-ST AZ model. The data set of on-going, planned, and programmed projects developed in a previous task will be coded into the model.

The model will produce condition information for the baseline data set (2005) and the horizon years 2015 and 2030. Model outputs will include a range of primary performance measures for six of the nine planning factors: mobility, reliability, preservation, economic competitiveness, safety, and resource conservation. The remaining three planning factors, accessibility, connectivity, and security will be assessed outside of HERS-ST AZ.

Deficiencies will be identified by comparing pavement, crash, congestion, and geometric conditions with the respective deficiency level. The model results will be exported into the regional GIS database that is developed for the study.

Since the HERS-ST AZ results will focus primarily on roadway capacity and safety deficiencies, additional needs and deficiencies will be identified in the following categories:

- ☐ Bridge sufficiency
- ☐ Short- and long-term pavement needs
- ☐ Multimodal deficiencies will be identified for bicycles, pedestrians, and transit.
- ☐ ITS needs and strategic deployment plans
- ☐ Access management needs
- ☐ New facilities and possible impacts on the existing system
- ☐ Deficiencies regarding Arizona's Port of Entries (from Motor Vehicle Division)

Document Results

Prepare Working Paper No. 2 documenting needs and deficiencies in the Western Area. The working paper will

include GIS maps, tables and charts to clearly relay the findings of Task 3. Working Paper No. 2 will be submitted to the TAC for review and comments. Comments will be incorporated into the Draft Final Report.

Task 4: First Round of Public Meetings

The first round of public meetings will be held in accordance with the approved Public Involvement Plan. The meetings are planned at three different locations around the study area.

The preparation and conduct of the meetings will include the following tasks:

Public Meeting Sites: Several locations for the meetings will be determined through discussions with ADOT and the TAC. The locations will be convenient to the identified project stakeholders. Potential locations include Bullhead City, Lake Havasu City, Kingman and Yuma.

Publicity: Materials will be prepared to inform the public of the time, location, and purpose of the meetings. Meeting preparation will include a public notice suitable for publication in the appropriate newspapers (publication in newspapers by ADOT), the development of a mailing list of potential stakeholders, mailing the meeting notice to the stakeholders, and the preparation of a press release. All of these items will be presented to the ADOT Project Manager and the Communication and Community Partnership (CCP) Office for approval prior to their use.

Presentation

Materials:

Presentation materials for public meetings, including display boards, handouts, and com-

ment forms, will be prepared. All materials will be reviewed by the ADOT project manager, Carol Slaker.

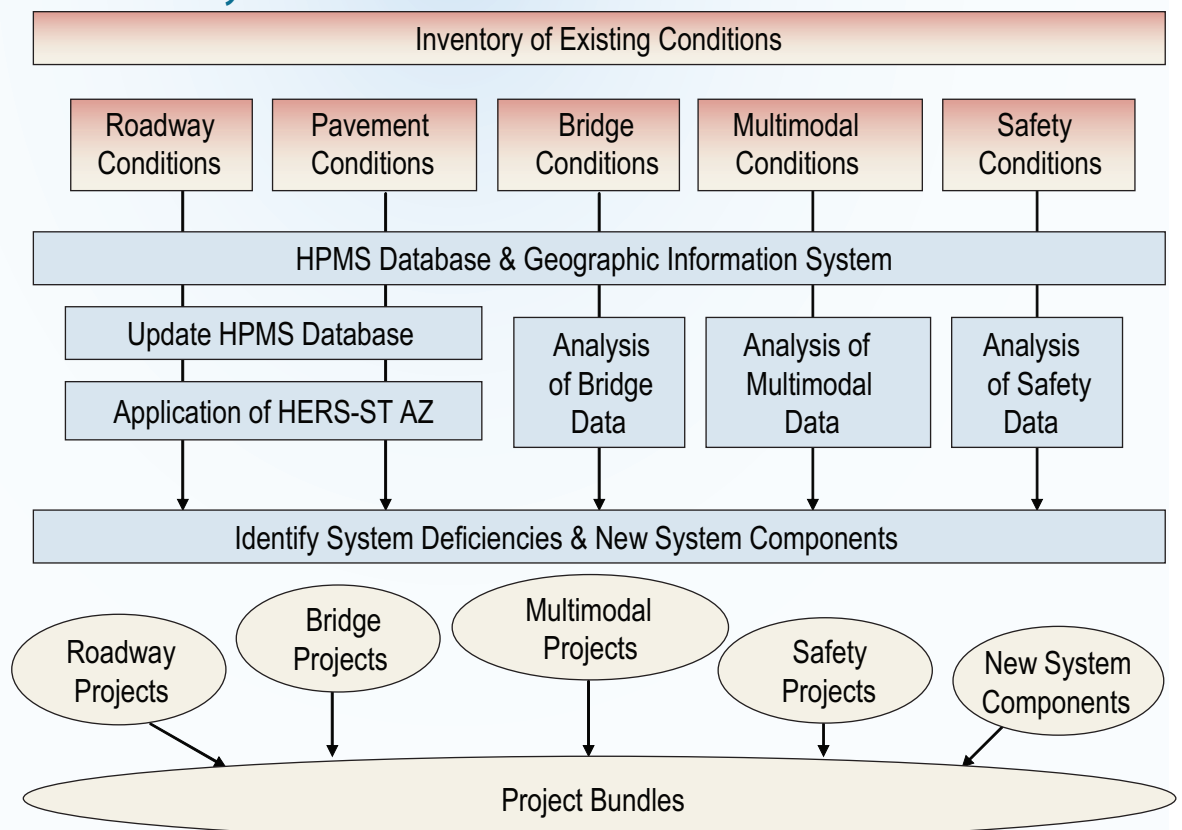
Conduct of Meetings: It is anticipated that the meetings will have an open house format with a short presentation and displays and handouts for public review. If required, a bilingual person will be in attendance.

Preparation of Summary Report No. 1: Following the completion of the meetings, a summary report will be prepared. This report will provide documentation of the meetings, including all publicity materials, materials presented, comments received, and responses to the comments. The report will be submitted to ADOT and the TAC for review and comment.

Task 5: Program of Prioritized Projects

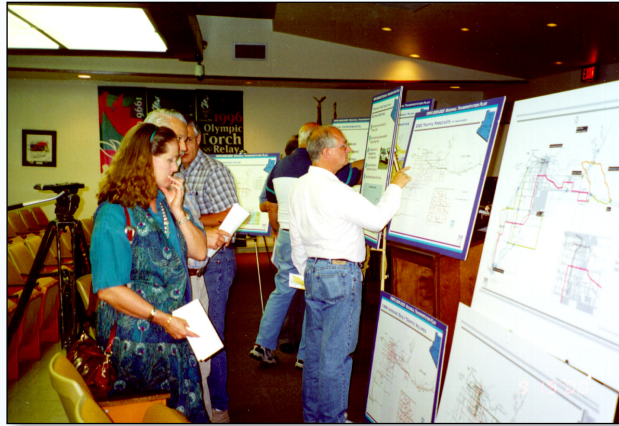
Based on the needs and deficiencies identified in Task 3 and the public comments received in Task 4, potential improvement projects will be identified. Using accepted performance measures, the HERS-ST model will be used for the identification of potential improvements. Once potential improvements are identified, HERS-ST applies a benefit-cost analysis to select the best set of improvements for implementation.

HERS-ST Analytical Procedures



The basis for the prioritization of projects will be the performance measures generated by HERS-ST and the methodology developed in the Move-AZ plan. The project analysis results in a combination of projects, called project bundles.

Projects will also be identified to address multimodal deficiencies. PB will work with ADOT Transportation Planning, ADOT Public Transportation Division, ADOT Districts, and regional agency staff to define the project elements that best meet the identified needs and deficiencies.



We will develop a prioritized list of projects with individual or combined project elements. The results can be reported by funding periods, usually defined as five-year increments. Based on the Title VI considerations, the effects of any project on minority populations, both positive and negative, will be documented. The results of the prioritization efforts will be mapped. The projects will be presented for incorporation into the MoveAZ Plan process.

Task 6: Second Round of Public Meetings

The second round of public meetings will be held in accordance with the approved Public Involvement Plan. The meetings are planned at three different locations around the study area. The purpose of these meetings is to present a preliminary list of projects and request comments on the material presented.

The preparation and conduct of the meetings will include the following tasks:

Public Meeting Sites: It is expected that the second round of public meetings will be conducted at the same locations as the first round of meetings.

Publicity: As in Task 4, materials will be prepared to inform the public of the time, location, and purpose of the meetings and will work with the CCP Office to ensure that minority and low-income populations are adequately notified. Meeting preparation will include a public notice suitable for publication in the appropriate newspapers (publication in newspaper by ADOT), mailing the meeting notice to the stakeholders, and the preparation of a press release. All of these items will be presented to ADOT for approval prior to their use.

Presentation Materials: Presentation materials for public meetings, including display boards, handouts, and comment forms, will be prepared. These materials will summarize the information contained in Working Paper No. 3 and depict recommendations.

Conduct of Meetings:

During the meetings, PB will assist ADOT staff by making assigned presentations and being available to answer questions from the attendees.

Preparation of Summary Report No. 2: Following the completion of the meetings, a summary report will be prepared. This report will provide documentation of the meetings and will be submitted to ADOT and the TAC for review and comment.

Task 7: Draft Report

The Draft Final Report will present the study process, data, and results. It will be a compilation of the three working papers and the summary reports from the public meetings. The report will include graphics, drawings, and tables as needed to clearly present issues, constraints, improvement opportunities, and the recommendations.

The Draft Executive Summary will include a brief description of the transportation conditions in the region, the analysis conducted, and a tabulation of the recommended improvements, costs, and funding periods.

Task 8: Final Report

Comments on the draft documents will be tabulated and addressed. The Draft Final Report and Draft Executive Summary will be revised as appropriate. A copy of the Final Report, the Executive Summary and a CD copy of the report will be sent to each member of the TAC. In addition, 35 copies of the Final Report, 40 copies of the Executive Summary and 50 CD copies of the reports will be delivered to ADOT.